

Half-Wave Vacuum Rectifier

DUODECAR TYPE

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC). 3.15 ± 0.32 volts

Current at heater volts = 3.15 0.220 amp

Direct Interelectrode Capacitance (Approx.):^a

P to (K+IS+H) 1.5 pf

Mechanical:

Operating Position. Any

Type of Cathode Coated Unipotential

Maximum Overall Length: 3.625"

Seated Length 3.000" to 3.250"

Diameter. 1.062" to 1.188"

Dimensional Outline See *General Section*

Bulb. T9

Cap Small (JEDEC No. C1-1) or

cap Small (JEDEC No.C1-1) or
Small With Tubular Support (JEDEC No.C1-34)

Base. Small-Button Duodecar 12-Pin (JEDEC No.E12-70)

Basing Designation for BOTTOM VIEW. 12FV

Pin 1 - Heater, Cathode,
Internal Shield

Pin 2 - Same as Pin 1

Pin 3 - *Do Not Use*

Pin 4 - No Internal Connection

Pin 5 - Same as Pin 1

Pin 6 - Same as Pin 1

Pin 7 - Same as Pin 4

Pin 8 - Heater

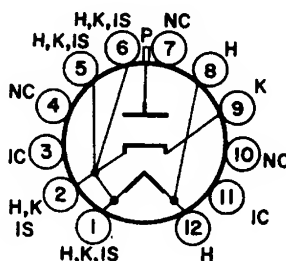
Pin 9 - Same as Pin 1

Pin 10 - Same as Pin 4

Pin 11 - *Do Not Use*

Pin 12 - Heater

Cap - Plate



PULSED-RECTIFIER SERVICE

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^b

Peak Inverse Plate Voltage^c 30000 max. volts

Peak Inverse Plate Voltage	50000 max.	vols
Peak Plate Current	88 max.	ma

Peak Plate Current	88 max.	ma
Average Plate Current	1.7 max.	ma

^a without external shield.

b As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

c This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.



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DATA
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3AT2

OPERATING CONSIDERATIONS

The high voltages at which the 3AT2 is operated are very dangerous. Great care should be taken in the design of equipment to prevent the operator from coming in contact with these high voltages. Particular care against fatal shock should be taken in the measurement of heater voltage. Under all circumstances, circuit parts which may be at high potentials should be enclosed or adequately insulated.

X-radiation. The voltages employed in some television receivers and other high-voltage equipment are sufficiently high that high-voltage rectifier tubes may produce *X-radiation* which can constitute a health hazard unless such tubes are adequately shielded. Relatively simple shielding should prove adequate, but the need for this precaution should be considered in equipment design.

